

WHAT IS CLAIMED IS:

1. An ink comprising a pigment and a resin encapsulating a coloring material.

5            2. The ink according to Claim 1, wherein the  
pigment is a carbon black.

3. The ink according to Claim 2, wherein the carbon black is a self-dispersing carbon black to the surface of which at least one hydrophilic group is bonded directly or through another atomic group.

4. The ink according to Claim 3, wherein the hydrophilic group is anionic.

5. The ink according to Claim 1, which further comprises a pigment dispersant.

6. The ink according to Claim 5, wherein the dispersant has an anionic hydrophilic group at the surface thereof.

7. The ink according to Claim 1, wherein the resin encapsulating a coloring material has an anionic hydrophilic group at the surface thereof.

8. The ink according to Claim 1, wherein the

coloring material is a water-insoluble dye.

9. The ink according to Claim 1, wherein the coloring material is a pigment.

10. The ink according to Claim 1, wherein the pigment and the coloring material have substantially the same color.

11. The ink according to Claim 1, wherein the coloring material is encapsulated in a microcapsule made of the resin.

12. An ink comprising either a pigment having a cationic group, or a pigment and a pigment dispersant having a cationic group, and a resin encapsulating a coloring material.

13. The ink according to Claim 12, wherein the pigment is a carbon black.

14. The ink according to Claim 12, wherein the pigment is a self-dispersing carbon black to the surface of which at least one cationic hydrophilic group is bonded directly or through another atomic group.

15. The ink according to Claim 12, wherein the coloring material is a water-insoluble dye or pigment.

5 16. The ink according to Claim 12, wherein the resin encapsulating a coloring material has a cationic hydrophilic group at the surface thereof.

10 17. The ink according to Claim 12, wherein the pigment having the cationic group and the coloring material have substantially the same color.

15 18. The ink according to Claim 12, wherein the coloring material is encapsulated in a microcapsule made of the resin.

20 19. An ink cartridge, comprising an ink container containing an ink, which comprises a pigment and a resin encapsulating a coloring material.

25 20. The ink cartridge according to Claim 19, wherein the pigment is a carbon black.

21. The ink cartridge according to Claim 20, wherein the carbon black is a self-dispersing carbon black to the surface of which at least one hydrophilic group is bonded directly or through another atomic group.

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29. The ink cartridge according to Claim 19, wherein the coloring material is encapsulated in a microcapsule made of the resin.

Sub 30. An ink cartridge, comprising an ink  
container containing an ink comprising either a pigment  
having a cationic group, or a pigment and a pigment  
dispersant having a cationic group, and a resin  
encapsulating a coloring material.

31. The ink cartridge according to Claim 30,  
wherein the pigment is a carbon black.

32. The ink cartridge according to Claim 30,  
wherein the carbon black is a self-dispersing carbon  
black to the surface of which at least one cationic  
hydrophilic group is bonded directly or through another  
atomic group.

33. The ink cartridge according to Claim 30,  
wherein the coloring material is a water-insoluble dye  
or pigment.

34. The ink cartridge according to Claim 30,  
wherein the resin encapsulating the coloring material  
has a cationic hydrophilic group at the surface  
thereof.

35. The ink cartridge according to Claim 30,  
wherein the pigment having the cationic group and the  
coloring material have substantially the same color.

36. The ink cartridge according to Claim 30, wherein the coloring material is encapsulated in a microcapsule made of the resin.

5 37. A recording unit, comprising:  
an ink container containing an ink comprising a pigment and a resin encapsulating a coloring material,  
a recording head, and  
a means for feeding the ink from the ink  
10 container to the recording head.

38. A recording unit, comprising:  
an ink container containing an ink comprising  
either pigment having a cationic group, or a pigment  
15 and a pigment dispersant having a cationic group, and a resin encapsulating a coloring material,  
a recording head, and  
a means for feeding the ink from the ink  
20 container to the recording head.

39. An ink set comprising a first ink and a second ink in combination,  
wherein the first ink comprises a pigment and a resin encapsulating a coloring material, and  
25 each of the first and second inks has a color selected from the group consisting of yellow, magenta, cyan, black, red, green and blue.

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45. An image recording process, comprising the step of applying an ink, which comprises a pigment and a resin encapsulating a coloring material, to a

recording medium.

5 46. The image recording process according to Claim 45, wherein the coloring material is encapsulated in a microcapsule made of the resin.

10 47. An image recording process, comprising the step of applying an ink to a recording medium, wherein the ink comprises either a pigment having a cationic group, or a pigment and a pigment dispersant having a cationic group, and a resin encapsulating a coloring material.

15 48. The image recording process according to Claim 47, wherein the coloring material is encapsulated in a microcapsule made of the resin.

20 49. An image recording process, comprising the step of applying at least two color inks to a recording medium using an ink-jet recording method to form a multi-color image, wherein one ink comprises either a pigment having a cationic group, or a pigment and a pigment dispersant having a cationic group, and a resin encapsulating a coloring material, and the other ink  
25 comprises a compound having an anionic compound.

50. The image recording process according to

51. The image recording process according to  
5 Claim 49, wherein the ink comprising either the pigment  
having a cationic group, or the pigment and the pigment  
dispersant having a cationic group, and the resin  
encapsulating a coloring material is a black ink.

53. An image recording apparatus, comprising:  
a recording unit which has an ink container  
containing an ink comprising a pigment and a resin  
encapsulating a coloring material, a recording head and  
a means for feeding the ink from the ink container to  
the recording head, and

54. The image recording apparatus according to Claim 53, wherein the coloring material is encapsulated in a microcapsule made of the resin.

55. An image recording apparatus, comprising:

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